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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/006,342

11/30/2001

Yoon Kean Wong

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09/21/2004

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EXAMINER

PRIZIO JR, PETER

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,342

Applicant(s)

WONG ET AL.

Examiner

Peter Prizio

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213....

Disposition of Claims

- 4) ☒ Claim(s) 12, 15, 17, 19-22 and 24-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12, 15, 17, 19-22 and 24-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment dated 16 June 2004.

Claim Status

2. Claims 12, 15, 17, 19 – 22, and 24 – 45 are pending.
3. Claims 12, 15, 17, 19 – 22, and 24 – 45 are rejected.

Specification

4. The disclosure is objected to because of the following informalities: The definition of opaque is something that is not transparent. Therefore the use of opaque on page 7, line 21 makes no sense. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. **Claims 12, 15, 17, 19 – 22, 24 – 28** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure pertaining to the bezel feature that is moveably coupled to the housing to move between an open position and a closed position is lacking a description of the hinge type device that allows the bezel to rotate and still be able to open or close in relation to the display has not been disclosed. If the bezel is coupled to the housing using a hinge type device as indicated, but not referenced in Figures 2 and 3, it has not been shown that it is also free to rotate which defines a bezel. Just because the figures illustrate the lid in a closed position and an open position is not enough to allow one of ordinary skill in the art to make or use this device.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 29 – 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,556,222 to Narayanaswami in view of US Patent 5,050,139 to Oberst.

10. Regarding claim 29, Narayanaswami (Fig. 2) teaches a housing (20) that contains one or more components of the electronic device (components shown in Fig. 2), a display assembly (98) including a screen (100) provided on the front panel of the housing (column 6, lines 35 – 43, 'watch face'), an interface for the bezel (68), the

interface being configured to provide an output in response to a rotation by the bezel (95 or 400, column 8, lines 29 – 33), and a processor (55) coupled to the interface to receive the output in response to the rotation of the bezel (column 8, lines 61 – 66), wherein the processor is configured to perform one or more operations based on the rotation of the bezel (column 9, line 1 – column 11, line 21). Narayanaswami fails to teach the bezel extending from opposite sides of the housing.

11. However, Oberst (figs. 1 and 2) teaches a device including a housing (12) including a first slot (27) on a first side (24 on the left side of fig. 2) and a second slot (27) on a second side (24 on the right side of fig. 2), wherein when the housing is viewed frontally so as to face the display assembly (Fig. 1, where the front is the face of the device), the housing extends along a direction of an axis X (the axis x will be in the direction of line 2 – 2) and an axis Y (axis Y is the direction perpendicular to line 2 – 2), a bezel (22) partially contained within the housing (12) to extend from opposite sides of the housing in reference to at least one of the axis X and the axis Y (column 3, lines 5 – 8), wherein the bezel is rotatable (column 3, line 8) about a rotation axis (80), then bezel being sized to extend out of the first slot and the second slot of the housing (column 3, lines 5 – 10).

12. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the bezel input device as taught by Narayanaswami to accommodate a bezel that is embedded within the case so as to extend from slots on opposite ends of the case as taught by Oberst for the benefit of a

transparent faceplate that can protect the device and fewer accidental bezel actuations since the majority of the bezel is embedded within the case.

13. Regarding claim 30, Narayanaswami, as applied to claim 29 above, further teaches wherein the processor (55) is configured to detect the rotation of the bezel via the interface (58, column 6, lines 1 – 5), and wherein the rotation of the bezel causes the processor to launch an application (column 9, lines 15 – 25).

14. Regarding claim 31, Narayanaswami, as applied to claim 29 above, further teaches wherein the processor (55) is configured to detect the rotation of the bezel via the interface (58, column 6, lines 1 – 5), and wherein the rotation of the bezel causes the processor to present one or more items on the screen of the display assembly for selection (column 9, lines 4 – 14).

15. Regarding claim 32, Narayanaswami, as applied to claim 29 above, further teaches wherein the processor (55) is configured to perform one of more operations based on a radial change in position of a reference point on the bezel as a result of the rotation (column 8, lines 33 – 35) where the reference point must be known if the device can determine the radial change of the bezel.

16. Regarding claim 33, Narayanaswami, as applied to claim 29 above, further teaches wherein the processor (55) is configured to perform one or more operations based on one of more of a duration or arc length of the rotation of the bezel (column 8, lines 33 – 35).

17. Regarding claim 34, Narayanaswami, as applied to claim 29 above, further teaches wherein the bezel forms a perimeter portion of the housing (column 8, lines 27 – 29).

18. **Claims 35 – 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication US 20030117380A1 to Kanzaki in view of Narayanaswami.

19. Regarding claim 35, Kanzaki (Figs. 1, 2 & 3) teaches an electronic device comprising a housing that contains one or more electronic components of the electronic device (paragraph 11, a display unit with a driver and control unit), a display assembly (1) wherein the display assembly is contact-sensitive (paragraph 17), and a processor (15) configured to display a bezel feature on the display assembly (paragraph 26, the virtual dial displayed on the display unit 12 is inherently displayed by a processor), detect a continuous contact with the display assembly having a starting point and a finishing point (paragraph 25) wherein at least one of the starting point and finishing point is on a surface portion of the screen corresponding to where the bezel feature is displayed (paragraph 18), determine an input based on the continuous contact wherein the input is based on a position of at least one of the starting point and the finishing point (paragraph 25, from the start position of the touch to the end position of the touch constitutes a continuous touch), and perform an operation based on the input (paragraph 9), but fails to teach wherein the operation includes a selection of an application.

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20. However, Narayanaswami teaches a jog dial device that the operation includes a selection of an application (column 9, lines 10 – 25). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to increase the function of the jog dial as taught by Kanzaki with the jog dial that can be used to select an application as taught by Narayanaswami for the benefit of added features to the virtual bezel. One would be so inclined to utilize the teachings of Narayanaswami since Narayanaswami also teaches a text/character input mode that can be used for a numerical input similarly to the bezel as taught by Kanzaki.

21. Regarding claim 36, Kanzaki, as applied to claim 35, further teaches a bezel feature displayed on the perimeter of the screen of the display assembly (in figure 2, the dials are displayed on the perimeter of the screen).

22. Regarding claim 37, Kanzaki, as applied to claim 35, further teaches a response to the continuous contact where the processor is configured to present one or more items of the screen for selection (5-3).

23. Regarding claim 38, Kanzaki, as applied to claim 35, further teaches a response to the continuous contact where the processor is configured to perform one of more operations based on the continuous contact (paragraphs 28-34).

24. Regarding claim 39, Kanzaki, as applied to claim 35, further teaches a processor configured to perform one or more operations based on the duration of the continuous contact (paragraph 21).

25. **Claim 40** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanzaki in view of Narayanaswami as applied to claim 35 above, and further in view of US Patent 6,468,212 to Scott et al. (Scott).

26. Regarding claim 40, Kanzaki in view of Narayanaswami fails to teach a processor configured to enable a user to move a reference on the bezel feature an arc length and to interpret a position of the reference as an input, but Kanzaki in view of Narayanaswami does teach the appearance of the input apparatus can be any shape and combined with its teachings of detecting a start point and end point of the touch, as stated above, renders it obvious to modify the dial input with the dial as taught by Scott. Scott teaches (Fig. 5) a bezel feature (76) with a reference (78) and the user can move a reference on the bezel an arc length (column 8, lines 20 – 36) and interpret the position as an input (column 8 where control knobs are well known input devices). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kanzaki in view of Narayanaswami with the bezel shape as taught by Scott for the purpose of knowing if the knob has been turned into the danger zone (80). One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

27. **Claims 41 – 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Narayanaswami in view of US Patent Application Publication 2003/0115384 to Sonehara et al. (Sonehara).

28. Regarding claim 41, Narayanaswami (Figs. 2 and 8) teaches a housing (20) having a front panel (column 6, lines 35 – 43, 'watch face'), a display (100) provided on the front panel, a processor (55) housed within the housing (20), a bezel feature (400) provided on the front panel (see fig. 8) that interfaces (68) with the processor (55), and wherein the processor (55) is configured to perform an operation corresponding to a selection of an application based on an input received through operation of the bezel feature (column 9, line 1 – column 11, line 21), but fails to teach the bezel feature is formed on a contact-sensitive surface it also does not disclose the method used to determine the rotation input.

29. However, Sonehara (paragraphs 58 – 59 and 62) teaches a jog dial input where the bezel feature a hardware component ('rotary body') that is formed on a contact sensitive surface (paragraph 58, lines 7 – 9) on which a pointer ('downward elastic contact leg') may be dragged to indicate an input (paragraph 59) and that the jog dial can be arranged in any easy-to-operate manner (paragraph 63).

30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to read the movement of the bezel feature as taught by Narayanaswami with the contact sensitive surface method as taught by Sonehara for the benefit of providing a means to determine the rotation of the bezel.

31. Regarding claim 41, Sonehara, as applied to claim 41 above, further teaches the bezel feature is responsive to a drag of a pointer from a first portion of the bezel feature to a second position of the bezel feature (paragraph 58, when the upward elastic contact leg slides on the radial contact plate, the bezel will be responsive when the leg

makes contact with the contact portion therebetween and therefore it is responsive from a first position to a second position depending on the distance between the contact portions).

32. Regarding claim 43, Narayanaswami, as applied to claim 41 above, further teaches wherein the processor (55) is also configured to use input provided by the bezel feature to set a digital clock (column 9, lines 26 – 51).

33. Regarding claim 44, Narayanaswami, as applied to claim 41 above, further teaches wherein the processor (55) is also configured to use input provided by the bezel feature to select an alphanumeric character (column 10, lines 20 – 37).

34. Regarding claim 45, Narayanaswami, as applied to claim 41 above, further teaches wherein the processor (55) is also configured to affect a content appearing on the display while performing the operation (column 10, lines 38 – 54, where 'when a letter is selected, previously entered and stored names beginning with that letter may be displayed on the high resolution screen display')

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US Patent has been included to show another device that utilizes a bezel type input:

US Patent 6,597,279 to Haraguchi

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Prizio whose telephone number is (703) 305-5712. The examiner can normally be reached on Monday-Friday (7:30-5:00), alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Prizio
Examiner
Art Unit 2674

Prizio
September 13, 2004

PD

Henry N. Tran

HENRY N. TRAN
PRIMARY EXAMINER